Painting Leadhead Jigs with Powder Based Epoxy Paint

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Objectives
Participating young people and adults will:
1. Develop proper jig painting (dipping) technique
2. Learn curing process
3. Critique painted jigs to improve painting skills
4. Learn safety procedures while using a heat source
5. Have fun while learning

Youth Development Objectives
Participating young people will develop:
1. Enhanced hand-eye coordination
2. Enhanced planning and execution skills
3. Manage dangerous materials in a safe manner
4. Practice cooperation

Roles for Teen and Junior Leaders
1. Demonstrate uses of various types of jigs
2. Assist participants with jig painting technique
3. Demonstrate safe handling of heat source
4. Evaluate painted jigs and suggest improvements
5. Assist with set up and break down of painting area
6. Encourage young people as they learn painting skills

Potential Parental Involvement
1. See "Roles for Teen and Junior Leaders" above
2. Arrange to provide equipment and materials
3. Arrange for or provide transportation

Best Time: Anytime
Best Location: Well lighted, dry, comfortable setting
Time Required: 30 to 90 minutes

Equipment/Materials
- safety glasses
- dust mask (optional)
- locking forceps (best) or needle nose pliers
- shallow 8 - 10 oz. sealable container with lid
- matches or lighter
- powder paint
- denatured alcohol
- alcohol lamp
- drying rack (see fact sheet)

References

Safety Considerations
Probably the biggest safety concern is a burn resulting from heating the jig head beyond the melting point of lead. Lead melts at approximately 621°F, at which point it will liquefy and drip, striking whatever is below. If your hand is in the way it will result in a nasty burn. If you are sensitive to fine powder, a dust mask will help.

1 Adapted from multiple sources
2 American Sportfishing Association, 1033 N. Fairfax St., Ste 200, Alexandria, VA 22314
Evaluation Activities/Suggestions
1. Compare participant made jigs with model jig
2. Observe changes between first jigs painted and subsequent ones
3. Evaluate ability of participant to observe safety precautions

Lesson Outline

I. Introduction
   A. Preparing the working area
   B. Preparing the jigs, materials and paint
   C. Painting the jigs
   D. Curing the Jigs
   E. Adding eyes and/or glitter

II. Preparing the working area
   A. Clean dry working surface

III. Preparing jigs, materials, and paint
   A. Wash jigs in vinegar
      1. Rinse and let dry
   B. Fill alcohol burner and light
   C. Prepare the powder paint
      1. Pour paint in shallow bowl shaped sealable plastic container
      2. Close container and shake to "fluff" up the powder

IV. Painting the jigs
   A. Grasp hook at bend with forceps
   B. Pass and rotate jig head through flame
      1. Heat jig to approximately 350°F
      2. Briefly "swish" jig through powder
      3. Tap to remove excess powder
      4. Reheat if necessary to liquify paint

Painting jigs with powder based epoxy paints is a fun and easy way to make manufactured quality jigs in just about any color you want. Using powder paint correctly takes a little practice, but once mastered becomes easy.

SELECT a clean, flat surface with plenty of room to work on. Lay newspaper or construction paper on surface in case of spills and to ease clean up.

WASH jigs for about 5 minutes in a small bowl filled with vinegar to remove impurities on the jig surface such as oils and dirt. Rinse with running water and lay out on a paper towel to dry.

PUT on safety glasses. FILL alcohol burner with denatured alcohol (available at most hardware stores) and light wick with match or lighter.

TRANSFER paint from original container to an 8 - 11 oz. bowl shaped sealable plastic container. The wide mouth of the bowl makes paint application easier. CLOSE the container and SHAKE to loosen and "fluff" the powder. Loose, fluffy powder will help create a more consistent, thin finish on the jig head.

Use a pair of forceps to GRASP the jig head at the bend of the hook.

ROTATE the jig head through the flame heating both sides of the jig. The jig head needs to be heated to approximately 350°F to adhere properly. It helps develop a pattern for different sized jigs. Naturally, the lighter the jig head the less time you will need to heat it to reach 350°F. Count "Mississippi" to establish a pattern. A 1/16 oz. may heat to the proper temperature in 3 Mississippi while a 1/2 oz. jig may require a count of 12 Mississippi.

Once the proper temperature is reached, QUICKLY SWISH the jig through the powder with a side-to-side motion to cover the entire surface. DO NOT DIP OR PUSH the jigs into the powder. REMOVE the jig IMMEDIATELY and the painted surface should melt and gloss. If the jig smokes, reduce the preheat time by a few counts. If the powder does not melt pass the jig head ABOVE (not in) the flame for a few seconds until it starts to melt and gloss over. Remember to fluff the powder after
5. Place on rack to dry

V. Curing powder painted jigs

A. Clean out paint filled hook eyes prior to curing
B. Turn oven to bake at 275 - 300°F
C. Place drying rack with jigs in oven for 30 minutes
D. Remove from oven and let cool for 2 - 3 minutes

VI. Adding eyes and/or glitter

A. Adding eyes
   1. Apply stick on eyes
   2. Apply doll eyes using super glue
   3. Dip the head of a nail in liquid epoxy or vinyl based paint
      a. Apply dab of paint to both sides of jig head
      b. Place on rack to dry

B. Adding glitter
   1. Double dipping just painted jig into clear powder paint with glitter mixed in.
   2. Brush on clear epoxy or vinyl paint mixed with glitter

Lesson Narrative

Powder Paint Background

Powder based epoxy paints are fairly new to the home tackle crafting market but are quickly replacing liquid based vinyl and epoxy paints as a way to create a durable, high gloss, colored finish of lead head jigs. Powder paint has many advantages. Its inexpensive, covers a jig head in one coat, and creates a durable finish that rivals many store bought jigs. Using powder paint is less messy and produces minimal odor. Although powder paint is new to the tackle crafting industry it’s been around a long time and has been used extensively to paint washing machines, dryers, refrigerators and other appliances. Powder paint is heat activated. It liquefies at approximately 350°F. Appliance manufacturers finish their products in huge ovens. The powder is sprayed on to appliances and melts on contact with the metal. In a final step, the appliances are cured under heat creating the shiny bombproof finish we all expect on a washer or dryer. Thankfully for the home tackle crafting market, powder paint colors have been expanded beyond the almond, white, and black found on most appliances. Powder paint comes in a rainbow of colors, including every five or six jigs painted.

PLACE the freshly painted jig on a rack to dry and cool for a few minutes. See fact sheet on how to make a simple drying rack for jigs and poppers.

CURING powder painted jigs creates a "bomb proof" like finish that is highly resistant to chipping and flaking. The paint surface prior to curing trends to be brittle and chips off easily.

Before you begin the curing process, use a large jig hook or other sharp object to REMOVE any paint that may be blocking the hook eye of any jig you intend to cure. It is almost impossible to clean out the hook eye after the jigs have been cured.

POSITION the jigs on the drying rack and place in an oven for approximately 30 minutes. Remove and let cool for a few minutes and your ready to add eyes or glitter or GO FISHING!

Many fishing experts think the placing eyes on jigs, flies, and other lures are critical to catching more fish. ADDING eyes to jigs is easy and makes them look great!

Three easy methods to create eyes on jigs include purchasing stick on or doll eyes or painting them yourself. Sticks on eyes have an adhesive back that sticks right to the jig surface. Doll eyes are APPLIED using super glue. The head of a nail can be dipped in liquid paint and then applied to either side of the jig head to fashion a set of eyes. It is recommended that you USE a liquid epoxy or vinyl based paint. These paints, unlike lacquer or oil paints will not react with soft plastic lures.

Many anglers also like to ADD a topcoat of glitter to their jig heads. This can be accomplished in two ways. You can double dip a jig head in powder paint to add a glitter topcoat.

IMMEDIATELY following the initial dip to paint the jig head, dip it again in clear powder paint mixed with glitter color of your choice. Or you mix glitter in with some clear liquid epoxy or vinyl paint and brush it on the jig head.
fluorescent and glow colors. A clear powder paint is also available that can be mixed with glitter to create a variety of finishes.

Sources for Powder Paint
Powder paint can be found at bait and tackle dealers. If your local dealer does not carry powder paint, it can be purchased through mail order catalogs such as Bass Pro Shops, Cabelas, Janns/Netcraft, and Barlows Tackle Shop. Powder paint costs between $5-$6 for a 4 oz. jar which should be enough paint to finish hundreds of jig heads. One manufacturer of powder paint is Component Systems, 5003 Packer Drive, Wausau, WI, 54401, (715) 845-3009.